

Measuring Excellence for Soldiers

AMC GUIDE to METRICS

U.S. Army Materiel Command
5001 Eisenhower Avenue
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FOREWORD

Measuring performance is a critical part of the management process. It provides the data to determine the cost of operations and products, the rate of return for investments made, and the relative worth of products, processes and people in their contributions to the health of the entire enterprise. Carefully chosen metrics can tell the leadership of an organization not only where they are in reference to organizational goals, but also whether or not they are going in the right direction and at the right speed to reach those goals.

This principle of performance measurement is emphasized in three national level initiatives:

- o The National Partnership for Reinventing Government (formerly the National Performance Review). Agencies are encouraged to develop a more competitive posture and help create "a government that works better and costs less."

- o The Government Performance and Results Act of 1993 (PL 103-62). Government agencies are required to develop strategic and performance plans and to "establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity."

- o The President's Quality Award Program. It emphasizes decision-making based on facts and business results. The proof of an organization's excellence is expressed in metrics of key performance indicators.

This document provides guidance on the use of metrics and defines the U.S. Army Materiel Command Review and Analysis process. The most important reason for AMC to measure performance is to ensure that our products and services meet the needs of our customers. Our ultimate customers are our soldiers.

I. AMC COMMAND GROUP GUIDANCE.

The formulation of the AMC Command Review and Analysis (R&A) and the selection of AMC metrics have been guided by the following requirements from the AMC Command Group:

- Use standard formats for graphs.
- Define metrics which are consistent and comparable from organization to organization.
- Minimize work load across the command.
- For each metric graph, show a goal, planned performance to reach that goal and actual performance.

II. BACKGROUND.

A. Metrics and the President's Quality Award Criteria.

The President's Quality Award Program encourages and recognizes organizational excellence in the federal government. The seven criteria used to evaluate organizations closely follow those of the Malcolm Baldrige National Quality Award, an internationally recognized standard of excellence.

President's Quality Award Criteria

- 1. Leadership**
- 2. Strategic Planning**
- 3. Customer Focus**
- 4. Information and Analysis**
- 5. Human Resource Focus**
- 6. Process Management**

1. To adapt an old saying, "The proof of the pudding is in the metrics." Performance measurement is related to each of the seven criteria of the President's Quality Award Program. The two obvious criteria that require metrics are "Information and Analysis" and "Business Results." The "Information and Analysis" criteria address the management and effectiveness of the use of data and information to support key organization processes and the organization's performance management system. It stresses a decision process based on facts. The "Business Results" criteria address the organization's performance and improvement in

key business areas. Continuously improving performance over a 3 - 5 year period shows maturity in a quality journey.

2. Some additional relationships to the other criteria are described below.

a. Leadership - Most metrics that can be used to evaluate leadership effectiveness are qualitative in nature and involve surveys of customers, stakeholders, the work force, and neighbors. However, the feedback is necessary for the senior leaders to improve the leadership systems.

b. Strategic Planning - High performance strategic plans are used to guide the organization's present operations to a vision of the future. Each strategic goal is supported by data to measure progress toward that goal. From the goals and metrics, performance improvement plans are developed for each key business process as required. Individual performance plans and evaluations are linked to the organization's performance towards its strategic goals.

c. Customer Focus - Organizations should have a systematic approach to listening and learning from current and potential customers. While qualitative in nature, metrics can be used to evaluate and improve their customer interface as well as how complaints are handled.

d. Human Resource Focus - Metrics should become part of the system for relating job design, compensation, and recognition to strategic goals. Individual metrics help make performance evaluation decisions more objective. Team metrics help to focus and recognize team accomplishments.

e. Process Management - Metrics help determine if changes to business processes actually contribute to better products and services.

B. What to Measure.

The selection of metrics depends on what is to be measured and the decisions that will be based on the performance shown in the metric. Here are a few options

What to Measure

1. **Progress to Goals**
2. **Trends**
3. **Milestones**
4. **Competition**

that can be considered.

1. Progress toward strategic goals - Each strategic goal should have one or more metrics. Broad goals may require several indicators.

2. Trends vs. targets - The decision on which indicators to use depends on the maturity of the processes being measured. In new processes, specific goals may be unknown, but metrics can give the general direction or trend - improving or getting worse. Where specific targets have been defined, the metric shows whether or not the goal has been reached.

3. Milestone schedules - In some cases, it is important to know if performance is progressing according to plan, especially when there are several interrelated processes that must be coordinated within a larger system. Here specific milestones can be tracked and reported.

4. Comparison to competitors and benchmarking - Besides specific goals, an organization can compare its performance to that of its competitors as a measure of their relative success. While exact data may be difficult to obtain or interpret, performance levels of competitors can help reset an organization's goals. However, when pursuing world class excellence as part of a total quality management philosophy, an organization should compare its performance against that of the best in the world, i.e. benchmarking.

C. Customer vs. Stakeholder.

An organization must understand the requirements of both its customers and stakeholders in order to be successful. A customer uses the products and/or services of the organization and may or may not pay directly for them. For AMC, the soldier is our ultimate customer, but soldiers do not pay directly for the materiel we provide. Other customers, such as Program Managers, can reimburse AMC directly for services provided. A stakeholder does not use the products and/or services of the organization, but can exert influence that affects the resources, structure and even the very existence of that organization. AMC has many groups of stakeholders: the American people through the Congress and the Administration; higher headquarters such as Office of the Secretary of Defense and Headquarters, Department of the Army; and private sector

groups or organizations which can influence national leaders.

CUSTOMERS and STAKEHOLDERS
Know the Requirements of Both Groups

D. Who Needs Metrics.

1. Leaders - The most immediate requirement for performance measurement comes from the top leadership of the organization. Many management decisions such as, resource allocation, pricing, and incentive awards require objective data to support the decision process.

2. Customers/Stakeholders - The customer or stakeholder wants to know the level of performance for the organization to be able to make decisions on whether to buy its products or invest in its operations.

3. Work Force - It is essential to share metrics with the work force. Empowerment, accountability and team pride are based on each individual's knowledge of how their performance is reflected in the performance of the entire organization. Metrics provide the feedback that unleashes creativity and energy for continuous improvement.

4. The Record - For government agencies, metrics are also a matter for the public record, and serve as a track record which justifies the resources being allocated from the American taxpayer.

E. Types of Metrics.

The most significant metrics are those that measure outcomes, what happens as a result of the organization's products and services, or outputs, what products and services are provided to the customers. Outcomes can be very difficult to measure or to determine how much of the outcome is due to a particular product or service. Outputs become difficult when multiple organizations contribute to

Types of Metrics

1. Quantitative Direct
2. Qualitative Direct
3. Quantitative Indirect
4. Milestone Progress

the final product. The following four types of metrics show some options to consider when metrics are being selected.

1. Quantitative Direct - These are direct measurements of the "goodness" of the results achieved. They can be measurements of products and services being delivered to customers, or results required by the organization's stakeholders. The criteria are established based upon the customers' or stakeholders' requirements and perception of what is needed. Such data is repeatable and auditable.

2. Qualitative Direct - Usually these data are gathered from customers and stakeholders through surveys and interviews. Qualitative metrics can give an indication of where an organization stands in terms of customer satisfaction and whether or not performance is improving. However, it is difficult to compare results with the competition or to use the metrics for a long period of time. The key is to standardize the questions being asked and the criteria for each rating and keep them constant over the period of use.

3. Quantitative Indirect - Indirect measures can be derived from in-process indicators and typically do not measure outputs or outcomes. They are highly correlated to output quality and are especially important in processes that take many steps and long time periods to complete.

4. Milestone Progress - For unique processes, especially those being used for the first time, metrics showing the completion of various milestones over time can be useful. Counting milestones completed is seldom meaningful unless they are all very similar. Percentage of resources consumed against a planned rate of consumption, however, can show how well the resources match the milestone achievements.

F. Characteristics of Good Metrics.

1. Completeness - All the information needed to make a judgement on the data is available in the metric.

2. Reliability - Data are

Good Metrics	
1.	Complete
2.	Reliable
3.	Defined Goodness
4.	Timely

auditable and the results are repeatable; the definitions of data elements are precise.

3. Defined Goodness Criteria - The metric should state the desired performance level by goals, tolerances or trend direction.

4. Timeliness - The metric must be available in time for the work force to be able to affect change for the next reporting period.

G. Evaluation vs. Analysis of Metrics.

Metrics offer two perspectives for the user: evaluation and analysis. For those outside the organization, the metrics provide an evaluation of how well the organization has performed in the past. For the work force and leadership, metrics can also provide an analytical tool to identify problems, create solutions and measure performance of process changes. The analysis can be the basis for proactive change to enhance future performance.

1. Evaluation implies the comparison of actual performance against a set of standards or goals, which have been defined prior to the performance period. It answers the question, "How have we done?" The answer should be predominantly factual. However, in the complex business processes in which AMC is engaged, evaluation of a specific metric may only focus on one aspect of the entire process and the evaluation may be one of judgement and experience.

2. Analysis of metrics provides an insight to future performance and responds to the question, "How will we do in the future?" Analysis also provides some of the reasons for the level of performance achieved, but the emphasis should be on identifying problems that need to be corrected so that future performance can improve.

H. Metrics Difficulties & Dilemmas.

Meaningful metrics are not easy to define for organizations with complex processes and significant interdependence with external forces. The following are a few potential areas of difficulty.

1. Measuring too many attributes - Metrics should be limited to those that are most significant to the customer or to the organization's goals.

2. Making composites of items that vary widely - Trying to count a number of different actions as all the same usually results in a meaningless or easily manipulated metric.

3. Lack of control of the entire process - It may be better to define sub-processes which can be controlled.

4. Long cycle times - Processes that take a long time to complete require definition of sub-processes that provide indicators of performance excellence.

5. Cost of data - Collection of data can be expensive and should be weighed against the value of the metric.

6. Immature business processes - Goals and data definitions may be difficult to establish when a process is new and the organization has little experience on which to base its decisions.

7. Lack of vision and goals - Without organizational goals, it is difficult to know what to measure for success.

I. How to Select a Goal.

Metrics require criteria for goodness either in the form of a goal or direction of a trend. There are a number of ways to define goals including the following:

**Set Goals to Meet
Customer Needs**

1. Customer Requirements - Find out the performance that the customer expects and set goals accordingly.

2. Common Sense/Intuition - This may be the only tool available very early in the definition of a process and might be a statement of the obvious. However, it is important to establish a goal with a metric even if it is adjusted later when more experience has been gained.

3. Analysis - Sometimes statistics, models or computation can be used to determine an ideal goal. It is a good place to start. Experience will help to redefine such goals.

4. Stakeholder Requirements - Frequently AMC performance goals are established at the OSD or HQDA level. Other times they are set by law. The difficulty is to insure that the data being used for the metric is defined to match the intent of the stakeholders.

5. Comparison - Information on the performance levels of competing or similar organizations is useful. The difficulty again is to be able to insure that the data elements being measured have identical definitions, i.e. comparing apples to apples.

6. Benchmarking - In order to achieve world class quality, performance metrics must be compared to those of the best in the world. Benchmarking is not just a visit to a recognized world class performer. It is a disciplined approach to insure that process definitions are clearly understood, data elements are defined and then comparisons are made and information is exchanged. Goals derived from benchmarking represent a very mature quality journey.

III. THE U.S. ARMY MATERIEL COMMAND REVIEW AND ANALYSIS

A. Command Emphasis.

The AMC Command Review and Analysis (R&A) is a cooperative activity for all of the Major Subordinate Commands (MSC), the larger Separate Reporting Activities (SRA), and the Headquarters AMC (HQAMC) staff. The purpose is to provide accurate, consistent information for leaders at all levels of responsibility. The AMC is committed to performance excellence for our soldiers.

B. The AMC Metrics Paradigm.

1. Tiers - The value of a particular metric depends on the level of the user. Within AMC, metrics can be grouped into at least three tiers reflecting three levels of users.

a. The AMC Command Tier is targeted to AMC customers and stakeholders and contains data that is cumulative across all appropriate AMC organizations. It also contains AMC data that is collected directly by the Headquarters Staff. Selected metrics can be used for information briefings for the general public, or for performance reviews with top leadership at the Department of the Army or Department of Defense, or for members of Congress or their staffs.

b. The Staff Tier represents the detailed collection of data on AMC performance for individual organizations and the Headquarters. The Command R&A metrics submitted by subordinate organizations and metrics collected directly by the Headquarters staff provide AMC leaders with an assessment of how well the mission is being performed.

c. The Organization Tier focuses on the MSCs and SRAs. It contains both the Command R&A metrics applicable to each subordinate organization and other measures of performance which are required by the commander. Many of these may be unique to the organization or may be collected as part of an intense improvement effort. All should be related to organizational goals, planned achievements and actual results attained. There might also be additional organizational tiers for lower level organizations which can identify customers, specific products and services, and have significant control over their own processes.

2. Integration - The concept of different tiers makes it easier to identify the audience and thus the level of detail being displayed in our metrics. However, the information in the tiers must be integrated to insure a consistent picture of AMC's performance. Integration means that all tiers are working toward the same top-level goals, that data from the lower tiers feeds up to the top, data element definitions are standardized and the data is auditable at each tier for accuracy and consistency. Preserving the ownership of the data with the appropriate tier is also vital for an integrated set of metrics for AMC.

3. Definitions - Appendix A contains definitions of terms used in describing the AMC R&A process.

C. AMC Metrics.

1. Construction - Each AMC metric consists of three parts as defined below. Samples are contained in Appendix B.

Parts of a Metric

- 1. INSTRUCTIONS**
- 2. NARRATIVE**
- 3. GRAPH**

a. The Instructions contains the name of the point of contact at HQ AMC responsible for the metric and information on how the metric is prepared including data source, authority for the goal and definition of tolerances.

b. The Narrative provides a standard description of the metric and contains an analysis of the data that describes the implications of the performance level achieved. It also identifies the action officer responsible for that analysis.

c. The Graph displays a picture of the data that should quickly show the performance level of the organization. Formats are defined by the Headquarters staff with inputs from the major subordinate commands and separate reporting activities.

2. Ratings - In order to focus leadership attention quickly, a rating is assigned for each of both the MSC/SRA metrics and the AMC composite metrics. The ratings are simply: Green, Amber or Red. The metric narrative contains the definition of the boundary between green and amber and between amber and red. Where specific quantitative definitions have not been made, the default ratings are as follows:

- Green - meeting the goal
- Amber - not meeting the goal, but performance can be corrected by the organization.
- Red - not meeting the goal, and performance cannot be corrected by the organizations without outside help or performance cannot be corrected at all.

3. Process - Consistent with the principle of continuous improvement, the AMC Command Review and Analysis (R&A)

Process (Appendix E - Figure 1.) is a continuing cycle of plan-do-check-act. The cycle runs as follows:

- a. HQAMC Staff loads the standard metric formats into the data base.
 - b. MSC/SRAs select and update applicable metrics.
 - c. MSC/SRAs load their metrics into the data base.
 - d. HQAMC Staff reviews and analyzes MSC/SRA data.
 - e. HQAMC Staff prepares composite graphs and analyses.
 - f. HQAMC Staff briefs the AMC Command Group
 - g. MSC/SRA Commander/Director briefs the AMC Command Group on any metrics which are "Out of Tolerance."
 - h. HQ Staff evaluates the R&A and revises metrics as required.
4. Current Metrics - See Appendix C for a recent list.

D. Typical Schedule.

While actual dates are set based upon Command events, the following represents the general timeframe for events leading up to the R&A. Timing is represented as work days after the end of the fiscal year quarter. See Appendix D for more details.

20 days: Data Lock - MSC/SRAs loaded metrics into the data base.

25 days: HQ Staff completes analysis and composite metrics are loaded into the data base.

27 days: Summary briefing charts are completed and briefing books are prepared for the Command Group.

30 days: Command R&A is presented.

40 days: Format Lock - Revised metric formats and new metrics are loaded into the data base for use in the next quarter.

E. Elements of the Analysis.

The analysis of metric information is key to a successful and "value-added" Review and Analysis. Briefers providing the analysis should consider the following areas as each applies to the metric:

Points to Consider

1. **Performance**
2. **Issues and Problems**
3. **Corrective Action**
4. **Projections**
5. **Customers/Stakeholders**

1. AMC performance against goals - A rating of red, amber or green is assigned and the tolerance for each rating is defined. The source of each goal is identified.

2. Key issues and/or problems - Issues that may require Command Group action or awareness are identified.

3. Corrective action taken or planned - The Command Group is told what is being done to correct/improve performance.

4. Projected performance - It is important to not only determine if the corrective action being taken will bring performance level up to the assigned goal, but also to identify conditions which may have a negative impact on performance for the fiscal year. The purpose is to avoid surprises.

5. Potential impact on customers and/or stakeholders - This is the "so what" portion of the analysis. The affect of AMC performance on the customers, stakeholders and AMC is projected. Possible complaints, adverse impact on the customers' mission, and/or good news should be reported.

F. The Command R&A Briefings.

The briefing of the AMC metrics is scheduled for the Command Group on a quarterly basis. The complete R&A is done in two parts.

1. Headquarters AMC Staff briefing - The HQAMC staff offices responsible for the metrics presents a composite display of the performance of AMC as a command including an

AMC rating and provides the analysis. Simultaneously the Performance Rating Summary (Appendix E - Figure 2.) is displayed showing the individual ratings that subordinate organizations have assigned their performance. Differences of opinion on ratings may also be discussed.

2. MSC/SRA briefing - The commander or director of each MSC and major SRA presents those metrics which are rated as either red or amber and provides an analysis using the same elements considered by the HQAMC staff (see para III. E.). Typically these presentations are done by video teleconference. The order of the metrics being presented is coordinated with the HQAMC staff.

G. Headquarters AMC Staff Role.

1. The Headquarters AMC staff offices are responsible for the following:

- a. Defining metrics and data elements.
- b. Establishing goals and tolerances for each metric.
- c. Preparing AMC Composite Metrics.
- d. Developing the analysis and corrective action for AMC performance.
- e. Providing advice to MSCs and SRAs.
- f. Promoting continuous improvement of the R&A process.

2. The guiding principles for the HQAMC staff in providing support and leadership for the AMC Command R&A include the following:

- a. Provide integrated, coordinated and consistent response to the MSCs and SRAs.
- b. Make improvements in a block fashion with appropriate time for the MSCs and SRAs to comply. Definitions, displays or instructions are not changed after "Format Lock" without coordination.

- c. Focus on customer satisfaction. The primary customers are the AMC Command Group and the MSCs and SRAs.
- d. Develop consensus solutions to process problems.
- e. Improve automation of the collection, transfer, storage and display of data.
- f. Promulgate guidance in a timely manner.

IV. SUMMARY

A. Review and Analysis Evaluation.

The Total Army Quality approach suggests that each process be evaluated periodically and improvements made. When evaluating a review and analysis process, it is important to distinguish carefully between bad metrics and metrics which make the organization look bad; unreachable goals and goals for which the organization is not extending itself enough to reach. The danger is that the R&A makes everything look good, but does not give leaders, customers and stakeholders good information. The questions that follow can be used to help evaluate both the process and the metrics which support an R&A.

1. What is the source of each goal? - Those that are set by the organization itself may be subject to negotiation. Those from higher headquarters are less likely to be negotiable at all. Goals set by careful analysis of competitors or benchmarking should not be dismissed without determining if the goal lies within the organization's vision statement.

2. What kind of analysis is being done? - The analysis should focus on what action is being taken to improve performance during the next quarter. If there is an anomaly in the data display for the quarter being presented, it is appropriate to explain it and move on. A long list of excuses on why the goal/plan was not met is data presentation not analysis.

3. Are systemic problems being addressed? - Process Action Teams or similar groups should be formed for any

process that consistently does not meet its goals. Reinvention Laboratories under the National Performance Review have authority to waive regulations, policy and instructions that are counter-productive. If the authority to change the process lies outside an organization, it is incumbent upon that organization to bring it up to the next level.

4. Are individual and team performance ratings linked to the results presented in the command metrics? - They should be. The performance measured in each metric should be included in someone's individual performance plan to insure accountability for results. Portions of that performance may be the responsibility of several individuals or an entire team. Individual performance plans can represent the integration of strategic goals, current metrics and individual performance.

5. How do the metrics relate to the needs of the customer? - Cost, schedule, and performance always remain high among customer concerns. However, conditions change and frequent dialog with customers helps to insure that changing customer requirements are considered in the continuous improvement of the review and analysis process.

B. Suggestions.

Comments and recommended improvements to this guide can be forwarded to the Office of the Special Assistant for Quality at

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AMC Guide to Metrics

APPENDIX A - Definitions

1. AMC Command Review and Analysis (R&A): An integrated system for measuring, analyzing and displaying the performance of the U.S. Army Materiel Command. The R&A includes: identifying performance goals, planning performance to achieve those goals, recording actual performance of AMC Major Subordinate Commands (MSCs), principal Separate Reporting Activities (SRAs) and the composite performance for the command. Results are presented to the Command Group through quarterly Command R&A briefings.

2. AMC Command R&A Briefings:

a. Command Performance Review: The HQ AMC Staff presentation and analysis of AMC performance for the previous fiscal year quarter. The analysis addresses the following: performance compared to assigned goals or plans, key issues or problems, corrective actions taken or planned, and a projection for performance for the next quarter and/or full fiscal year. The briefing consists of an Introduction, Performance Rating Summaries and AMC Composite Metrics.

b. MSC/SRA Out of Tolerance Analysis: The commander or director of each MSC and SRA briefs the metrics which are out of tolerance (rated amber or red) for their organization. The briefing must include the same metric graph and narrative which were loaded into the Command R&A data base. This briefing is done by video teleconference.

3. Metric: A measure of performance with three parts:

a. Instructions - definitions of the metric, data elements, graph axes, source of the data, criteria for the rating and the method for computation and display.

b. Narrative - the description of the metric, analysis of the performance depicted in the graph and identification of the individual who can explain the graph and analysis.

c. Graph - a pictorial display of the metric data with a performance rating of green, amber or red.

- 4. Metric Format:** A sample metric which can be used as a template by MSCs and SRAs to prepare applicable metrics. The sample metric is prepared in PowerPoint 4.0 and PowerPoint '97 formats.
- 5. Composite Metric:** A metric which shows the performance of AMC as a total command. It consists of a narrative and graph with the composite rating of AMC and is prepared by the HQ AMC point of contact.
- 6. Composite Rating:** A red, amber, green rating assigned by the Metric POC based on a total assessment of AMC performance as a command.
- 7. Out of Tolerance Metrics:** Metrics rated amber or red.
- 8. Performance Rating Summary:** A matrix which shows the performance rating for each metric as reported by each MSC and SRA and the AMC Composite Rating by the HQ Staff.
- 9. HQ AMC Metric Point of Contact (POC):** The individual at HQ AMC responsible for the design and content of the graph, instructions and composite metric. Provides advice and guidance to the MSCs and SRAs. Collects lessons learned and ideas to improve the assigned metrics. Each POC is identified in the instructions for their assigned metric(s).
- 10. Metric Group:** One of six logical collections of metrics which can be handled as a single Powerpoint 4.0/'97 file. The current groups include: General, Manpower, Resources, Logistics, Acquisition and Technology.
- 11. Metric Group Integrator:** The individual responsible for collecting inputs from the HQ AMC POCs and assembling them into a single file. This includes both the AMC Composite Metrics and the Metric Formats. The Metric Group Integrator is also responsible for assuring that the content of the file complies with the metric formats.
- 12. Command R&A Data Base:** An automated storage and retrieval capability for all metrics submitted by the MSCs and SRAs, the composite metrics prepared by the HQ AMC POCs, the metric formats and the briefing to the CG. Read access is available to all HQ AMC staff and to the MSCs and SRAs as they choose to distribute such access. Author

access (the ability to enter and change metrics) is controlled by the R&A Advisory Board.

13. Integrated Tiered Metrics: A concept for organizing metrics by the level of detail and the organizational level where they are used, while insuring consistency and efficiency by maintaining source level control at all levels.

14. Command R&A Advisory Board: HQ AMC staff who develop and manage the metric formats, R&A process and R&A schedule. Current member organizations include: DCSLOG, DCSRM, DCSCI, DCSRDA, DCSPER, Special Analysis Office and the Special Assistant for Quality (Chair).

AMC Guide to Metrics

APPENDIX B - Sample Metric Formats

Appendix B - Sample Format 1 - Instructions

Metric A1 - Administrative and Production Lead-time (ALT/PLT)

HQAMC Functional POC: James Gleason, AMCRDA-AC, DSN 767-4437, commercial: (703) 617- 4437, e-mail: jgleason@hqamc.army.mil

How to Prepare the Metric:

Dollar Weighted ALT/PLT: Calculate quarterly from the Budget Stratification Report. When two or more stratification reports must be averaged together, the total dollar value of ALT/PLT inventory requirements must be divided by the total value of one day of ALT/PLT per DoD 4140.1-M, "Secondary Item Stratification Manual." Each reporting activity will enter their specific goal on the narrative chart and the graph.

Linear ALT: Calculate quarterly using data from the RCS 127, Central Procurement Workloading Report. The average days are calculated by dividing the total ALT days for all Procurement Work Directives (PWDs) awarded during the quarter by the number of PWDs awarded during the quarter.

The first data point on the Y axis will be the value at the end of the previous fiscal year.

Date prepared: 15 August 1998

FORMAT SAMPLE

Appendix B - Sample Format 2 - Narrative

MSC/SRA Name

Metric A1 - Administrative and Production Lead-time (ALT/PLT)

Description:

This paragraph includes: the purpose of the metric, definitions, the source or authority for the goal, definition of the tolerances and other information to define the metric and allow it to be self-explanatory.

Analysis: **MSC/SRA Inputs**

Action Officer:

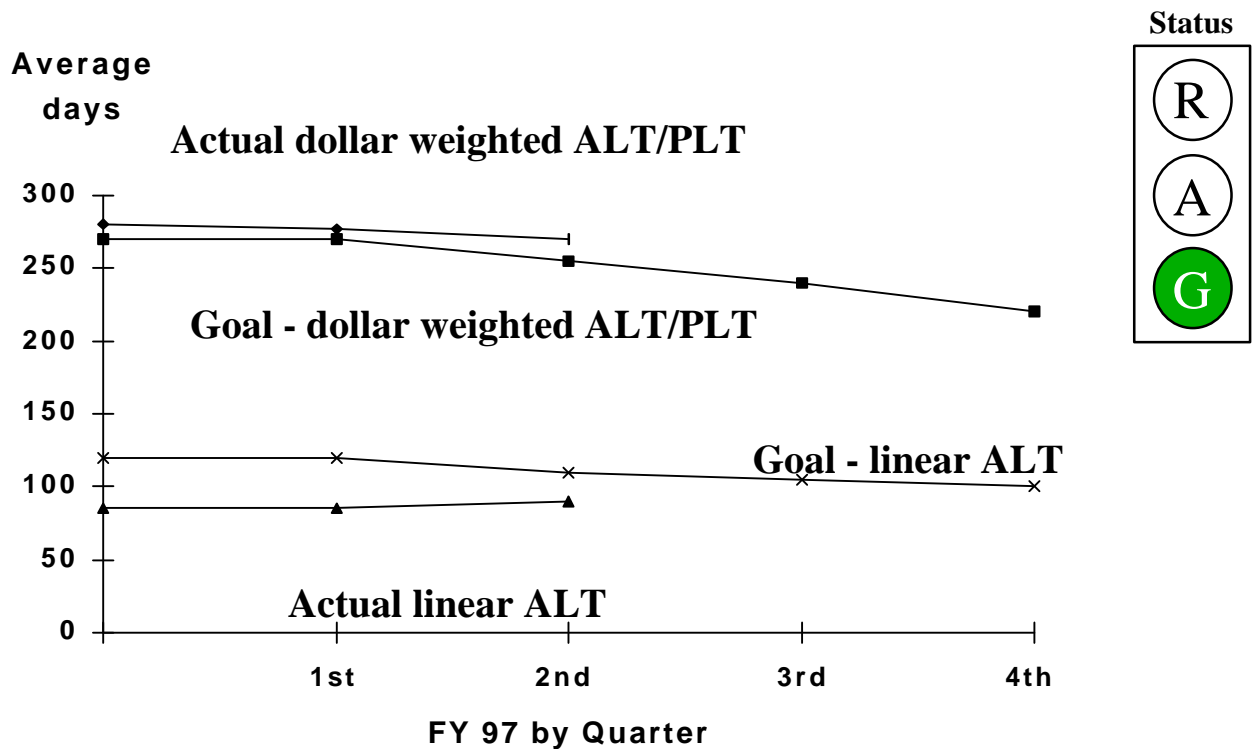
Data as of :

Date Prepared:

FORMAT SAMPLE

Appendix B - Sample Format 3 - Graph
MSC/SRA Name

Metric A1 - Administrative and Production Lead-time (ALT/PLT)



FORMAT SAMPLE

As of 31 March 1997

Date Prepared: 3 May 1997

AMC Guide to Metrics

APPENDIX C - FY98 Metrics List

No.	Metric Title	DCS/SOC
G1	American Express Program Delinquent Accounts	DCSRM
G2	OCONUS Travel	DCSPER
G3	Year 2000 Status	CIO
G5	Security Compliance	DCSPER
G6	Workers Compensation	DCSPER
G7	BRAC Progress Chart	AMCSO
G8	Unique Products & Services #1	AMCTQ
G9	Unique Products & Services #2	AMCTQ
G10	Unique Customer Survey Results	AMCTQ
M1	Civilian End Strength	DCSRM
M2	Civilian Workyear Execution	DCSRM
M3	High Grade Management	DCSPER
M4	Supervisory Ratios	DCSPER
M5	Enlisted Personnel Retention	DCSPER
R1	OMA Obligations	DCSRM
R2	PAA (less AMMO) Obligations	DCSRDA
R3	Ammunition Obligations	DCSAMMO
R4	RDTE Obligations	DCSRDA
R5	Canceling Accounts	DCSRM
R6	Army Working Capital Fund (AWCF) Ordnance	DCSRM
R7	AWCF Depot Maintenance	DCSRM
R8	AWCF Information Services	DCSRM

No.	Metric Title	DCS/SOC
R9	AWCF Supply Management Army	DCSRM
R10	Cost of Spares - Log Efficiency	DCSRM
R11	SMA Operations & Support Cost Reduction - Log Efficiency	DCSRM
R12	Net Income Before Depreciation Budget Variance	DCSPER
R13	Morale, Welfare and Recreation (MWR) Profitability	DCSPER
L1	Due In Beyond the Requirements Objective	DCSLOG
L2	Stock Availability	DCSLOG
L3	Ammunition Demilitarization	DCSAMMO
L4	On Hand Inventory	DCSLOG
L5	Integrated Sustainment Maintenance	DCSLOG
L6	Depot Maintenance Major Items OMA Program Obligations	DCSLOG
L7	Depot Maintenance Capacity	DCSLOG
L8	Depot Production Schedule	DCSLOG
L9	AMC Dormant Stock	DCSLOG
L10	Demand Forecasting Accuracy	DCSLOG
L11	Percent Unserviceables Inducted Beyond Repair Action Point	DCSLOG
A1	Administrative and Production Lead Time	DCSRDA
A2	IMPAC Micro-purchase Transactions	DCSRDA
A3	PM Acquisition Programs Performance	DCSRDA
A4	Value Engineering Savings & Cost Avoidances	DCSRDA
A5	Military Specifications and Standards	DCSRDA
A6	Electronic Commerce Actions	DCSRDA
A7	Letter of Agreement - Average Process Time	USASAC
A8	Small Business Program	AMCSB

No.	Metric Title	DCS/SOC
A9	Batteries - Log Efficiency	DCSRDA
T1	Technology Generation Programs	DCSRDA
T2	Technology Generation Outputs	DCSRDA
T3	Percent Out House Science & Technology Obligations	DCSRDA
T4	Science & Technology Objectives (STOs) and Advanced Technology Demonstrations (ATDs)	DCSRDA

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APPENDIX D - Detailed Support Schedule

Work Days	Est. Date	Action Required	Action Offices
Q-15		Memo to MSCs/SRAs with suspense for metrics to be in the data base	AMCTQ
Q-10		Format Lock Date Revised metric formats in data base	HQ Staff
Q+20		Data Lock Date MSC/SRA metrics in the data base	MSC/SRA
R&A-10		Confirm briefer's name to AMCTQ	MSC/SRA & HQ
R&A-8		Agenda for Command R&A finalized	AMCTQ
R&A-6		MSC/SRA Out of Tolerance Metrics printed for CG "prep book"	AMCTQ
R&A-5		AMC Composite Metrics in data base	HQ Staff
R&A-4		Introduction Briefing Completed <ul style="list-style-type: none"> o Status of metrics o Automation Improvement o Performance Ups & Downs o Metrics with Red Ratings o Agenda for HQ Staff Briefing 	AMCTQ
R&A-4		Performance Rating Summaries Complete	AMCTQ
R&A-2		Prep Books go to CG, DCG & C/S <ul style="list-style-type: none"> o Command Performance Briefing <ul style="list-style-type: none"> oo Introduction oo Performance Rating Summaries oo AMC Composite Metrics o MSC/SRA Out of Tolerance Metrics 	AMCTQ
R&A-1		HQ Staff Briefing file built in briefing sequence - graphs only	AMCTQ
R&A-1		Back-up transparencies of Command Performance Briefing printed	AMCTQ
R&A		HQ Staff & MSCs/SRAs brief CG	All

Use this table for planning purposes. Times, relative to the end of the fiscal year quarter, are approximate.

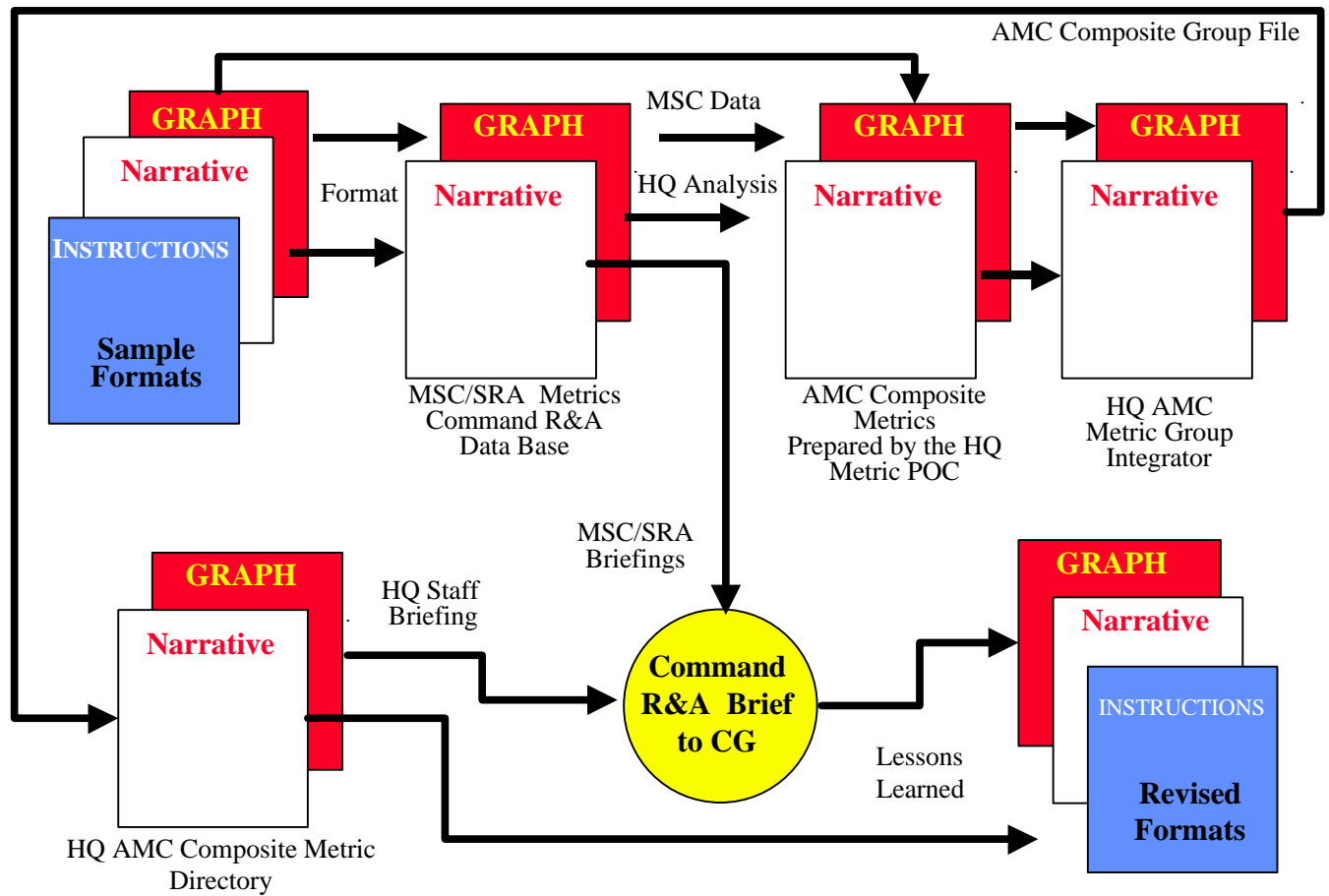
Q = Last day of fiscal year quarter

R&A = planned date of the Command R&A
Days are in work days

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APPENDIX E - Figures

Appendix E - Figure 1
AMC Command R&A Process



Appendix E - Figure 2 Sample Performance Rating Summary

